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PHYSICIANS PREFERENCES BIAS TREATMENT CHOICE FOR DEEP VENOUS THROMBOSIS

R Sestiko and I. Leent. Department of Medicine, Stanford University, Stanford, CA.

Deep vein thrombosis (DVT) can be treated with a thrombolytic drug (often streptokinase) followed by anticoagulation therapy. This treatment reduces the incidence of postthrombotic syndrome (PTS), but increases the risk of bleeding, stroke and death. In a recent article in NEJM 1995:330:1864-9, using decision analysis, O'Meara et al. suggested that patient preferences influence care and outcomes along with the comparison of thrombolytic and anticoagulant therapy, the health status and knowledge of relevant health states. We hypothesized that, given a realistic description of the morbidity of PTS, many younger patients would have preferences consistent with use of streptokinase followed by intravenous heparin. However, the most common treatment for DVT favors the use of heparin alone, which reflects the physicians' values for intrageneric events rather than patient preferences.

We developed a multimedia utility assessment program that describes mild and severe PTS, and stroke and death. The treatment preference for DVT yielded an average 0.13 QALYs after heparin alone (p = 0.21). Individualized therapy based on perceived risk of PTS by an additional 0.12 (p<0.05). DVT patients had valid responses to the clinical problem and 15/24 had utilities for RTS of 0.1, allowing calculation of the additional disutility of an iatrogenic cause for stroke/death. Utilities for stroke/death resulting from treatment with thrombolysis ranged from 0.5 to 0.7 (median 0.6).

Substantial numbers of patients may have preferences favor treatment of DVT with streptokinase followed by heparin rather than heparin alone. Physicians often place an additional negative weight on intrageneric states that the patients prefer. Choice of therapy for DVT should be guided by formal or informal assessment of patient preferences.

QUALITY OF LIFE AND THE TREATMENT CHOICE OF SUCCESSFULLY TREATED LARYNGEAL CANCER PATIENTS

J. van der Heijden, J.D. Meyer, R. Knoops, J.P.M. Schouten, J.D.P. Hahnen, P.C. Lavender, C.A. Mepquires, P.J.M. Schipper. Dr. Daniel den Hoed Cancer Center, Rotterdam, Center for Decision Sciences, Department of Public Health, Erasmus University Rotterdam and the Department of Medical Psychology and Psychotherapy, Erasmus University Rotterdam.

Purpose. Quality of life (QoL) and treatment choice was assessed in 24 successfully treated laryngeal cancer patients. The results on QoL and treatment choice were compared with a control group of 24 respondents from the general population who also underwent this study. All patients were more than 3 years free of disease and had a history of radiation therapy (RT, n = 9) or surgery (S, n = 15) and volunteered in a clinical decision making study.

Methods. For measuring QoL we used generic (HRQoL, Karnofsky) and specific (RLQ, PDQ) questionnaires that were completed before the respondents entered the study. Treatment choice was elicited by means of a direct comparison using self-developed health scenarios for two treatment modalities (RT vs S+). Additionally, we studied the differences on these measures between the patients who were treated by RT and patients who were treated by S+ as primary treatment.

Results. In general no significant differences were found between the patients and the control group, except for the HRQoL. Patients indicated less pain, less sleeping problems and were socially less isolated than the control group. Comparison of the results between the patient groups (RT and S+) showed that the RT patients experience significantly less physical and psychological distress. Furthermore, they had a better self-reported health status than the S+ group. We were not able to detect if these results were caused by patient selection or treatment effects.

Conclusions. In general successfully treated laryngeal cancer patients showed no decreased in QoL, although we observed differences between the RT and S+ group. No relation was found between QoL and treatment choice.

DISEASE-SPECIFIC HEALTH STATES: DETERMINATION OF OPTIMAL INSTRUMENT CONSTRUCTION COSTS, UTILITY AND RELIABILITY

K. Gold, L. Bashir, E. Aronson, C. Lerman, C. Weaver, N. Mepquires, K. Sloman. Department of Medicine, Georgetown University, Washington, DC, 2 Danz-Farber Cancer Institute, Boston, MA.

The use of health states has become an essential cornerstone for many cost-utility analyses in a study of life year analysis. Since many existing instruments used to generate health states have not been tailored for this use, the resultant data does not facilitate maximally informative analyses in these areas of research. In this paper presented at the development of disease-specific health states for use in health utility assessments. This methodology includes the following: 1) a qualitative discussion of objective and subjective criteria for classification; 2) recommended psychometric properties including state and quality of life scales which affect the efficacy of ensuing analyses; 3) strategic considerations in instrument construction which allow for flexible selection of states based on a post-hoc evaluation of classification futility in a study of life year analysis. In addition to this methodology, we present a worked example of an instrument developed for evaluating health states of elderly women with early stage breast cancer. Using SP-36 data from a study of 260 hospitalized elderly, we present a cluster analysis which assisted in selecting key attributes that highly discriminate between elderly individuals. The analysis indicated that the data is characterized by seven clusters. Within each cluster, one or two questionnaire items showed superior discriminating power in this population. This information was incorporated into a strategic design of a set of health states that addressed other substantive and practical issues. This methodology may serve as a useful link in the development of population-specific preference measures for use in clinical trials.

ASSESSMENT OF INDIVIDUAL TREATMENT PREFERENCES FOR T3-LARYNGEAL CANCER: EFFECTS OF TIME AND DISEASE AND TREATMENT RELATED KNOWLEDGE

J. van der Heijden, P.F.M. Kraaijenhagen, J.D.E. Hahnen, P.C. Lavender, C.A. Mepquires, P.J.M. Schipper, J.D.P. Hahnen. Center, Rotterdam Center for Decision Sciences, Department of Public Health, Erasmus University Rotterdam and the Department of Medical Psychology and Psychotherapy, Erasmus University Rotterdam.

Purpose. To study the consistency and changes in individual treatment preferences for T3-laryngeal cancer in a group of successfully treated laryngeal cancer patients and in a control group of respondents from the general population with a repeated measurement design (T1 - T4).

Methods. This study involved a sample of 24 successfully treated T3-laryngeal cancer patients that were performed with an interval of two weeks. Utilities for two treatment modalities, i.e. surgical (S+) and radiation therapy (RT) and surgery plus additional radiation therapy (S+) were elicited by means of the time trade-off (TTO). In the first interview the respondents were instructed to use the time trade-off method, whereas the utilities were elicited by means of the time-trade-off method for the first time (T4). In the second interview the respondents were instructed to use the time trade-off method and the third interview the utilities were elicited (T2 - T3). In the third interview, two weeks later, utilities were elicited for the fourth time (T4). Correlational analysis were performed and individual treatment choices were compared for each measurement (T1 - T4) with the predicted utilities (QALD).

Results. The patient group showed higher QALE for both treatment modalities compared to the control group. Over time, substantial variation was observed between the four measurement moments. On an individual level, changes in the calculated treatment choices were observed in both the patient group and the control group between the four measurement moments.

Conclusions. The results show that individual treatment preferences change over time and are influenced by treatment and disease related knowledge. The mechanisms for these changes, especially the effects of education, are not yet clear.

THE INFLUENCE OF A PHYSICIAN'S OWN ETHNICITY AND GENDER ON ORIENTATION TO SUBSTANCE ABUSE PATIENTS

J. Marriott, R. Lorimer, R. Schaffer, J. Thomby, M. Holden and C. Valtinos. Department of Community Medicine, Baylor College of Medicine, Houston, Texas.

OBJECTIVE: To explore the relationship of a physician's own ethnicity and gender and type of medical practice to the surgeon's orientation toward management of substance abuse patients.

METHODS: A cross-sectional study, administered to physicians working in inner-city community health clinics, measured attributional style (AS) toward substance abuse patients, personal characteristics, and professional role traits by physicians' gender, ethnicity, and type of medical practice. Results: African-American physicians had the most positive orientation toward substance abuse patients and Hispanic physicians had the most negative (p<0.05) with white and Asian-Americans between. Listened to the positive AS toward substance abuse patients was predicted by professional authoritarianism (p<0.0001) and intolerance to clinical ambiguity (p<0.05). Among the four ethnic groups surveyed, African-American physicians were the least authoritarian and the most tolerant of clinical uncertainty (p<0.05). Asian-Americans scored highest on high-technology medicine, differing significantly from both African-Americans and whites (p<0.05) but not Hispanics. Pediatricians scored highest on negative AS toward substance abuse patients, authoritarianism, reliance on high-technology medicine, and intolerance to uncertainty in clinical medicine (p<0.00). Because all pediatrics surveyed were women, ANOVA restricted to females was performed by type of medical practice. Female pediatricians scored significantly higher on negative AS toward substance abuse patients than did other female physicians (p<0.05). They were also more authoritarian (p<0.05) and more intolerant of clinical uncertainty (p<0.05). African-Americans had the most positive decision making characteristics toward substance abuse patient management.

INFORMATION FRAME IN PHYSICIAN DESCRIPTION OF TREATMENT OPTIONS FOR CANCER PATIENTS

KR Yabroff1, LE Rubenstein1, KF Gold1, C Lerman1, C Weaver2, NJ Mepquires3, KA Schliman1, 1Georgetown University Medical Center, Washington, DC, 2Dana-Farber Cancer Institute, Boston, MA.

Patients with metastatic breast cancer frequently undergo aggressive therapy that has an uncertain quality-adjusted survival advantage. Framing theory suggests that individuals may not maximize their expected utility if presented with treatment information described in the negative (focused on the tumor), as opposed to the same information described in the positive (focused on remaining quality of life). We developed a survey to assess treatment recommendations by oncologists who offer stem-cell transplant therapy to their patients. The survey collected demographic data and written descriptions of the treatment recommendations for three standardized patient scenarios. Analysis of the closed-ended questions included descriptive statistics and log-linear regression of the recommendation of aggressive treatment across the three scenarios on physician characteristics and practice patterns. The survey was sent to 3,585 oncologists affiliated with a private stem-cell transplant network, with 60% responding. 22% of physicians recommended aggressive treatment for all three scenarios, 33% in only two scenarios and 45% in only one scenario. In univariate analysis, physicians who recommended stem cell transplantation in all three cases were likely to do so to improve survival (p<0.0001) and were more likely to present the information in a negative frame. Physicians who did not recommend stem cell transplantation in all cases were more likely to recommend an alternative treatment to improve quality of life (p<0.02). This study provides evidence that physicians may frame the description of treatment options when informing patients about aggressive cancer therapies.